In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1. (Withdrawn and Original) A method of making a polysaccharide over-producing bacterium comprising

introducing into a bacterium an *ica* nucleic acid operably linked to an *ica* regulatory nucleic acid,

wherein the *ica* regulatory nucleic acid comprises

(a) nucleic acid molecules which hybridize under stringent conditions to a nucleic acid molecule having a sequence of SEQ ID NO:2, have an addition, deletion or substitution in a region between and including nucleotides 9 and 43 of SEQ ID NO:2, and that enhance production of a polysaccharide from an *ica* locus, and

(b) complements thereof.

2-9. (Cancelled)

10. (Withdrawn and Original) A method of making a polysaccharide over-producing bacterium comprising

introducing into a bacterium an *ica* nucleic acid operably linked to an *ica* regulatory nucleic acid, wherein the *ica* regulatory nucleic acid comprises a mutant *icaR* nucleic acid, and

measuring polysaccharide production from the bacterium, wherein a high level of polysaccharide production is indicative of a polysaccharide over-producing bacterium.

11-33. (Cancelled)

34. (Withdrawn and Original) A recombinant polysaccharide over-producing bacterium comprising an *ica* nucleic acid operably linked to an *ica* regulatory nucleic acid,

wherein the *ica* regulatory nucleic acid comprises

(a) nucleic acid molecules which hybridize under stringent conditions to a nucleic acid molecule having a sequence of SEQ ID NO:2, have an addition, deletion or substitution in a region between and including nucleotides 9 and 43 of SEQ ID NO:2, and that enhance production of a polysaccharide from an *ica* locus, and

(b) complements thereof.

wherein the bacterium is not MN8m.

35-41. (Cancelled)

42. (Withdrawn and Original) A recombinant polysaccharide over-producing bacterium comprising a mutant *icaR* nucleic acid.

43-48. (Cancelled)

49. (Withdrawn and Previously Presented) A method of producing a bacterial polysaccharide comprising

culturing the polysaccharide over-producing bacterium of claim 34 in a growth medium, and

harvesting the bacterial polysaccharide from the culture.

50-52. (Cancelled)

53. (Withdrawn and Previously Presented) A method of producing an antibody to a bacterial polysaccharide comprising

isolating a bacterial polysaccharide from the polysaccharide over-producing bacterium of claim 34,

administering to a subject the isolated bacterial polysaccharide in an amount effective to produce an antibody, and

harvesting antibody from the subject.

54-62. (Cancelled)

63. (Currently Amended) An isolated nucleic acid molecule, comprising

(a) a nucleic acid ~~molecules~~ molecule which hybridizes under stringent conditions at 65°C in hybridization buffer, washing at room temperature with 0.15M sodium chloride, 0.015M sodium citrate, pH 7 (SSC) and at 68°C with 0.1-0.5 x SSC, 0.1 sodium dodecyl sulphate to a nucleic acid molecule having a sequence of SEQ ID NO:2, spans nucleotides 23 and 29 of SEQ ID NO.:2, ~~have~~ has an addition, deletion or substitution of at least two nucleotides in a region between and including nucleotides ~~9 and 43~~ 24 and 28 of SEQ ID NO:2, and ~~that~~ enhances production of a polysaccharide from a coding region of an *ica* locus when operably linked to an *ica* nucleic acid, relative to the level produced from a wild-type bacterium, ~~and~~ or

(b) a complement ~~complements~~ thereof.

64-68. (Cancelled)

69. (Previously Presented) An expression vector comprising the isolated nucleic acid molecule of claim 63, operably linked to an *ica* nucleic acid.

70. (Original) A host cell transformed or transfected with the expression vector of claim 69.

71. (Currently Amended) An isolated nucleic acid molecule selected from the group consisting of

(a) a fragment of a nucleic acid molecule having a sequence of SEQ ID NO:1, and

(b) complements of (a),

wherein the fragment spans nucleotides 23 and 24 of SEQ ID NO.:1 ~~a MN8m mutation~~ and enhances production of a polysaccharide from a coding region of an *ica* locus when operably linked to an *ica* nucleic acid, relative to the level produced from a wild-type bacterium.

72. (Cancelled)

73. (Withdrawn and Original) A method for identifying an isolated binding agent, comprising

contacting a first nucleic acid molecule having the sequence of SEQ ID NO:2 or a functionally equivalent fragment thereof with a candidate molecule and determining whether the candidate molecule binds to the first nucleic acid molecule, and

contacting a second nucleic acid molecule having the sequence of SEQ ID NO:1 or a functionally equivalent fragment thereof with the candidate molecule and determining whether the candidate molecule binds to the second nucleic acid molecule,

wherein a candidate molecule that binds to either the first or the second nucleic acid molecule but not both is indicative of an isolated binding agent.

74-83. (Cancelled)

84. (Withdrawn and Original) A method of identifying an *ica* promoter sequence associated with polysaccharide overproduction comprising

detecting a nucleic acid molecule having a sequence alteration from wildtype in a region between and including nucleotides 9 and 43 of SEQ ID NO:2.

85-89. (Cancelled)

90. (Withdrawn and Original) A method for identifying an *ica* regulatory nucleic acid molecule that enhances polysaccharide production comprising

altering a nucleic acid molecule having a sequence of SEQ ID NO:2, and

determining a level of reporter production by a bacterium that comprises the altered nucleic acid molecule operably linked to reporter nucleic acid,

wherein a higher than wildtype level of reporter protein production is indicative of an *ica* regulatory nucleic acid molecule that enhances polysaccharide production.

91-106. (Cancelled)

107. (Withdrawn and Original) A method of over-producing a protein in a bacterium comprising

introducing into a bacterium a nucleic acid operably linked to an *ica* regulatory nucleic acid,

wherein the *ica* regulatory nucleic acid comprises

(a) nucleic acid molecules which hybridize under stringent conditions to a nucleic acid molecule having a sequence of SEQ ID NO:2, have an addition, deletion or substitution in a region between and including nucleotides 9 and 43 of SEQ ID NO:2, and that enhance production of a polysaccharide from an *ica* locus, and

(b) complements thereof, and

wherein the nucleic acid encodes a protein to be over-produced.

108-115. (Cancelled)

116. (Withdrawn and Original) A method of over-producing a protein in a bacterium comprising

introducing into a bacterium a nucleic acid operably linked to an *ica* regulatory nucleic acid, wherein the *ica* regulatory nucleic acid comprises a mutant *icaR* nucleic acid,

wherein the nucleic acid encodes a protein to be over-produced.

117-133. (Cancelled)

134. (New) The isolated nucleic acid molecule of claim 63, wherein the isolated nucleic acid molecule comprises a sequence of SEQ ID NO:1.

135. (New) The isolated nucleic acid molecule of claim 63, wherein the isolated nucleic acid molecule comprises a nucleotide sequence between and including nucleotides 9 and 38 of SEQ ID NO:1.

136. (New) The isolated nucleic acid molecule of claim 63, wherein the isolated nucleic acid molecule comprises a deletion, addition or substitution of at least three, at least four or at least five nucleotides in the region between and including nucleotides 24 and 28 of SEQ ID NO:2.

137. (New) The isolated nucleic acid molecule of claim 63, wherein the isolated nucleic acid molecule comprises a five nucleotide non-wildtype substitution between and including nucleotides 24 and 28 of SEQ ID NO:2.

138. (New) The isolated nucleic acid molecule of claim 137, wherein the five nucleotide non-wildtype substitution has a sequence of ATAAA.

139. (New) The isolated nucleic acid molecule of claim 71, wherein the fragment has a nucleotide sequence between and including nucleotides 9 and 38 of SEQ ID NO:1.

140. (New) The isolated nucleic acid molecule of claim 71, wherein the fragment is at least 10, at least 20, at least 30, at least 40, at least 50, at least 60, at least 70, at least 80, at least 90, at least 100, at least 110, at least 120, at least 130, at least 140, at least 150, or at least 160 nucleotides in length.